United States
Department of
Agriculture

Marketing and
Regulatory
Programs

Animal and
Plant Health
Inspection
Service

Plant Protection
and Quarantine

9134 W.
Blackeagle Dr.
Boise, ID
83709

(208) 378-5797
FAX: 378-5794

November 7, 2003

Dear Reviewer:

The USDA, Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ) is proposing to conduct grasshopper and Mormon cricket suppression activities in Southern Idaho during 2004. The program would be conducted on federal, state and private rangelands. We invite your participation in the planning process for the Idaho Grasshopper and Mormon Cricket Suppression Program. We would appreciate your comments on the proposed program. They will comprise an important part of our decision process.

The environmental analysis for the Idaho Grasshopper and Mormon Cricket Suppression Program is under way, and one or more Environmental Assessment(s) will be completed by March 2004. A description of the project and the proposed action are in the enclosed summary.

If you have any questions or comments, please contact Dave McNeal, 9134 W. Blackeagle Dr., Boise, ID 83709. Comments submitted by December 15, 2003 will be most helpful to the analysis. Comments received in response to this project will be available for public inspection at our office and will be released in their entirety if requested pursuant to the Freedom of Information Act.

Sincerely,

C. David McNeal
State Plant Health Director
Idaho

Enclosure

SEEKING PUBLIC INPUT ON PROPOSED ACTION:
2004 Idaho Grasshopper and Mormon Cricket Suppression Program

Purpose and Need

Grasshoppers and Mormon crickets are part of a vast complex of native rangeland insects that play important roles in nutrient recycling by reducing plant material through their digestive process, and serving as food for other animal species.

However, like many insects, they have the potential for sudden and explosive population increases, resulting in outbreaks. When outbreaks occur, grasshoppers and Mormon crickets can destroy the forage needed by wildlife and livestock. By consuming plants, they can reduce the shelter habitat for rangeland birds, mammals and reptiles. They may consume threatened and endangered plants. Outbreak populations can also invade cropland and damage or destroy cultivated crops.

Approximately 40 species of grasshoppers (including Mormon crickets) occur in Idaho. Of these, five species reach outbreak status in limited areas on a fairly frequent basis. They are: migratory grasshopper, valley grasshopper, bigheaded grasshopper, clearwinged grasshopper, and Mormon cricket.

U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS) conducts ongoing surveys to determine the density and species composition of grasshopper populations on western rangelands. In Idaho, surveys can begin as early as February or March and may extend into September of each year. Surveys can determine current population densities, but do not provide precise predictive capabilities for coming years.

Outbreaks cannot reliably be prevented with currently available rangeland practices in Idaho, so when outbreaks occur, they may require direct intervention to suppress the population density. APHIS has authority under The Plant Protection Act of 2000 (7 USC §7701 *et seq.*) to conduct the suppression program. Subject to availability of funds and upon the request of the land manager, APHIS is charged to provide a rapid and effective response. The strategies used by APHIS for grasshopper and Mormon cricket suppression involve the use of insecticides which may be applied by air or ground. Non-insecticidal management tools may be utilized by land managers to depress grasshopper populations over a long term, but they will not rapidly diminish outbreak populations.

In the mid-20th century APHIS conducted large area grasshopper suppression programs in Idaho and other western states. The goal of those programs was to reduce grasshopper populations to the greatest extent possible. Persistent, broad spectrum insecticides were applied to blocks of rangeland that exceeded tens of thousands of acres. By the 1970's persistent insecticides were replaced with new generations of non-persistent, broad spectrum insecticides. Now, non-persistent selective insecticides are available for use in most cases, and the goal is to reduce the number of grasshoppers and Mormon crickets to levels that no longer pose a threat to agricultural lands. The maximum acreage APHIS ever treated in Idaho was in 1985, when

approximately six million acres were treated, primarily with malathion. Since 1995, APHIS has not treated more than 50,000 acres in any year in Idaho. In recent years APHIS has treated the following acreages for grasshoppers and Mormon crickets:

1999- 47,342 acres
2000- 1,100 acres
2001- 420 acres
2002- 590 acres
2003- 25,290 acres

Annual reports are available at: http://www.agri.state.id.us/plants/GHTOC.htm

To meet National Environmental Policy Act requirements, APHIS Published Rangeland Grasshopper and Mormon Cricket Suppression Program Final Environmental Impact Statement – 2002 (EIS). This document is available at http://www.aphis.usda.gov/ppd/es/gh.html. Additionally, APHIS will prepare one or more Environmental Assessment(s) for grasshopper and Mormon cricket suppression programs in Idaho in 2004.

Proposed Action

Subject to available funding and stipulations of the Plant Protection Act, APHIS would respond to requests from land managers for grasshopper/Mormon cricket suppression projects. APHIS would conduct evaluations to determine if populations warrant suppression. The evaluation would include species composition, population density, stage of grasshopper development, value of resources threatened by the grasshopper outbreak, and environmental risks associated with treatments.

Grasshopper and Mormon cricket suppression projects may be considered on rangeland scattered throughout Southern Idaho. Because outbreaks cannot be forecast, it is necessary to describe the overall area in which projects might be considered.

The project area is rangeland, primarily in the Great Basin Ecoregion. The elevation varies from below 3000 feet in areas along the Snake River Plain to nearly 7500 feet in mountainous regions. Essentially all of the area drains to the Pacific via the Snake River and its tributaries. Except for the Snake and its major tributaries, streams in the area are generally intermittent. The plains and foothills are semi-arid sagebrush steppe. Summers are hot and winters are moderate. Average annual temperature is 40 to 55 degrees F. Total annual precipitation averages 5 to 20 inches; almost no rain falls during the summer months.

The rangelands are utilized for cattle and sheep grazing. They provide habitat for native and introduced game and non-game animal species. They are in an accelerated state of ecological change due to invasion by exotic plant species, changes in fire patterns, and intervention by humans.

A limited number of insecticidal treatment options are available to APHIS. A treatment would be applied at up to one of the following rates:

16 fl. oz. carbaryl spray per acre (0.50 lb active ingredient)
10 pounds 5% carbaryl bait per acre (0.50 lb active ingredient)
8 fl. oz. malathion spray per acre (0.62 lb active ingredient)
1.0 fl. oz. diflubenzuron spray per acre (0.016 lb active ingredient)

Only one insecticide would be used in a treatment and no more than one treatment per year would normally be applied at any location.

Alternatives currently under consideration

Alternative 1. No Action:
APHIS would not conduct insecticide treatments or any other grasshopper/Mormon cricket suppression measures.

Alternative 2. Insecticide Applications to Large Rangeland Blocks to Suppress Grasshopper/Mormon cricket populations in Generalized Areas:
Upon evaluation of the population and conditions APHIS might conduct insecticide treatments on blocks of rangeland with a minimum block size of 10,000 acres to suppress area-wide grasshopper/Mormon cricket outbreaks.

Alternative 3. Insecticide Applications to Smaller Rangeland Blocks to Protect Specific Resources:
Upon evaluation of the population and conditions APHIS might conduct insecticide treatments on blocks of rangeland less than 10,000 acres in size to protect discrete resources threatened by grasshopper/Mormon cricket outbreaks.

Potential Issues

During development of the EIS and during grasshopper suppression programs carried out in Idaho over the past several decades, some potential issues were identified. These issues must be further clarified and additional issues may be identified through public comment and/or environmental analysis.

Human health – Exposure of humans to insecticides might result from treatments. Crews working on projects would be exposed to insecticides. Individuals who venture onto treated rangelands might be exposed.

Non-target species - Native and non-native species in the treated areas might be exposed to insecticides. Food, forage and shelter for rangeland species might be impacted by selection of the alternatives.

Socioeconomic impacts – Livestock owners, crop growers and beekeepers who operate on or adjacent to rangeland could be exposed to loss of earning potential by decisions made on the alternatives. The general public and recreationists who utilize rangeland for multipurpose activities might find the aesthetics of the rangeland impacted by selection of the alternatives.

Cumulative impacts – Actions by parties other than APHIS might have cumulative impacts. Repeated actions by APHIS might have cumulative impacts.

Species of special concern – Mitigation measures may be suggested for plant and animal species which may be impacted by decisions on the alternatives.

Threatened and endangered species – APHIS will protect species listed or proposed for listing under the Endangered Species Act which may occur in treatment areas and be adversely affected.

Pollution of water with insecticides - Mitigation measures may be suggested to insure that water is not polluted with insecticides.

Special considerations – Certain populations such as children, minorities, and low-income populations might be differentially impacted by various decisions on the alternatives.

Public Comments

Please submit comments to:

USDA APHIS PPQ
9134 West Blackeagle Drive
Boise ID 83709

Comments received by December 15, 2003 will be most helpful, and all comments received before the completion of the environmental analysis/analyses will be considered. Comments received in response to this proposed action will be available for public inspection at our office.